10/583502 IAP20 Rec'd PCT/PTO 20 JUN 2006

UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Caroline Heiligenmann et al

Application Number:

Unassigned

Filing Date:

Concurrently Herewith

Group Art Unit:

Examiner:

Title:

**DISHWASHER USING OZONE** 

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

## **INFORMATION DISCLOSURE STATEMENT**

Sir:

In accordance with 37 C.F.R. 1.98, I am submitting a completed "INFORMATION DISCLOSURE STATEMENT BY APPLICANTS" (Form PTO/SB/08A) with patents and/or publications as delineated therein attached.

DE 32 32 057 discloses a machine for cleaning washing, crockery or the like, having a reservoir for a cleaning agent, a programme control unit which controls the cleaning process, and an ozone generator to whose output an ozone feed line which leads into the generator is connected in order to ozonise the cleaning agent.

EP 0 808 894 discloses a method for cleaning utensils or dishes involves spray prewashing, followed by the main wash and final rinsing. the novelty is that the following are separately dosed into the pre-wash solution: (i) an alkali component and (ii) a complex-former. Also claimed is a kit containing (i) and (ii).

JP 11-137882 discloses an injecting port 42 is connected to the vicinity of the bottom part of an outer tub 5, and air containing ozone is spouted into water. An air supply valve 41 is opened in a condition actuating an ozone generator 37 and simultaneously an air pump 35. By this series of operation, a part of oxygen in the sir sucked by the suction port 40 is excited

Attorney Docket No.: 2003P01931WOUS

and changed to ozone by electric energy in the ozone generator 37. The air containing ozone is spouted in a bubble state into washing water filled in the outer tub 5. The ozone in the air is dissolved in water and oxidize and decompose organic substances in water to change the organic substances to lower molecular weight substances by the oxidation power. Thus COD and BOD in washing water can be reduced.

DE 195 44 392 discloses that in the washing mode as the first process, water is sprayed to the dishes and other tableware 4 set in a washing chamber 2 so that the contaminant is removed. In the disinfection mode as the next stage, ozone gas and water are brought into contact with each other in a gas-liquid mixing part 51 and scattered in the chamber through ozone atomizer nozzles 63. The in the drying mode, a heater 8 and blower fan are turned on so that drying by heating is conducted. A control part 50 controls an ozone generator 40, circulation pump 6, heater 8, and dryer fan on the basis of the weight data about apparatus 4 measured by a weight sensor(s), and thereby the ozone generation, washing, scatter of atomized ozone, and the drying by heating are regulated.

JP 10-14844 discloses that in the washing mode as the first process, water is sprayed to the dishes and other tableware 4 set in a washing chamber 2 so that the contaminant is removed. In the disinfection mode as the next stage, ozone gas and water are brought into contact with each other in a gas-liquid mixing part 51 and scattered in the chamber through ozone atomizer nozzles 63. The in the drying mode, a heater 8 and blower fan are turned on so that drying by heating is conducted. A control part 50 controls an ozone generator 40, circulation pump 6, heater 8, and dryer fan on the basis of the weight data about apparatus 4 measured by a weight sensor(s), and thereby the ozone generation, washing, scatter of atomized ozone, and the drying by heating are regulated.

JP 2002-112942 discloses a dishwasher for cleaning used dishes 12 is characterized in that it cleans the used dishes 12 by turning hot air generated by a heat exchanger 36 into a hot blast with a blower 34, and spraying the hot blast to the dishes 12 for drying after purifying water supplied to a washer body 14 by a purifier 24 in which many spherical tourmaline ceramic are stored, turning the purified water into ozonized water by an ozone generator 26, turning the ozonized water into cleaning waterdrops with an ultrasonic wave generator 30, and cleaning the dishes 12 by spraying the cleaning waterdrops to the used dishes 12.

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If no translation of pertinent portions of any foreign language patents or publications mentioned within the "INFORMATION DISCLOSURE STATEMENT BY APPLICANTS" is included with the aforementioned copies of those applications, patents and/or publications, it is because no existing translation is readily available to the Applicants. As per the Notice in 1273 OG 55 (August 5, 2003) no copies of any above-mentioned US patents and US patent application publications are submitted for this application which was filed after June 30, 2003.

Respectfully submitted

Revolle Want

Registration No. 32,860

June 20, 2006

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PTO/SB/08A (08-03)

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			U. S. PATENT	T DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	<u> </u>	Number-Kind Code <sup>2 (# known)</sup>			T iguico i i i podi
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		FORE	IGN PATENT DOCU	JMENTS		
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		DE 30 00 826	07/16/1981			
		DE 32 32 057	03/01/1984	Rudolf Gesslauer		
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		JP 11-137882	05/25/1999	Kawaguchi Takao		
		WO 03/096863	11/27/2003	Kenneth N. Price et al		V

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First Named Inventor Caroline Heiligenmann et al

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initials*	Cite No.1		MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
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FOREIGN PATENT DOCUMENTS						
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		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			Τ <sup>6</sup>
		DE 195 44 392	07/11/1996	Dr. Fritz Gorbahn et al		
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		International Search Report PCT/EP2	004/053430			V
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